

Claremont Colleges Scholarship @ Claremont

CGU Faculty Publications and Research

CGU Faculty Scholarship

1-1-2010

Leadership and OPFOR Networks

Robert J. Bunker

Claremont Graduate University

Recommended Citation

Bunker, Robert J. "Leadership and OPFOR Networks." Joseph A. Schaffer and Sandy Boyd, eds. *Advancing Policing Leadership; Lessons Learned and Preferable Futures*. Vol 6. Washington, DC: Futures Working Group, US Department of Justice: 122-137. March 2010.

This Conference Proceeding is brought to you for free and open access by the CGU Faculty Scholarship at Scholarship @ Claremont. It has been accepted for inclusion in CGU Faculty Publications and Research by an authorized administrator of Scholarship @ Claremont. For more information, please contact scholarship@cuc.claremont.edu.

LEADERSHIP AND OPFOR NETWORKS

Robert J. Bunker

Leadership—the activity of leading others.

OPFOR—opposing or opposition force.

Networks—structures and processes that link personnel and/or organizations together.

This essay will address the topic of leadership and OPFOR networks. This subject area has suffered from quite a bit of neglect yet has great homeland security potentials.¹ For law enforcement purposes, this represents an important topic because gaining an understanding of one's opponents and their organizational and leadership approaches is the first step in achieving mastery and dominance over them. The primary reason for the neglect of this topic is that it requires interdisciplinary knowledge concerning three distinct areas of study— leadership, OPFORs, and networks— and their subsequent analytical fusion. It is the intent of this essay to draw upon each of these areas of study and suggest strategies and methods that may be used to better understand their interrelationships and possibly open new lines of research. At the same time, when applicable, the focus will be upon how these may pertain to the Al Qaeda network.

The purpose of leadership in conflict and war is to get others to follow orders and directives, perform more effectively under fire, enhance personnel morale and, ultimately, promote in others the ability to achieve feats beyond their normal capacity. All of these capabilities are important to the functioning and 'combat effectiveness'² of non-state OPFOR networks engaging the law enforcement agencies and military forces of the United States.

A better understanding of the dynamics of leadership processes in OPFOR networks is important not only to our ability to disrupt, neutralize, and dismantle them but to facilitate the creation and development of our own allied operational networks. Line officers and police supervisors outside of specialized units may find this topic somewhat esoteric but the post 9-11 reality in which we now exist calls for all public safety officers and responders to begin to think

and plan for the very real possibility of future strikes against our homeland. With awareness of OPFOR patterns and functions comes our ability to develop new tactical and operational response capabilities and the organizational and technology based requirements to support them. Lessons learned concerning OPFOR leadership styles also provide us with an opportunity to better appreciate our own perspectives on police leadership and further our understanding of competing leadership models.

Types of OPFOR Leadership

Many different definitions and views on leadership exist. The bottom line, however, is how the art and science of leading others impacts real world operations. Since OPFOR networks exist for one singular purpose—to engage in conflict and war—we should view their leadership processes from this perspective. Unfortunately, a “one-size-fits-all” form of analysis does not exist concerning these leadership processes. Here, we examine several which offer useful insights for homeland security purposes.

One analytical method applicable to conflict and war is Clausewitz’s differentiation between the tactical, operational, and strategic levels of activity. Leadership types based on this analytical method, with the inclusion of OPFOR examples, would be as follows:

Tactical Leaders. Based on individual tactics and procedures found at the fire team and squad levels. OPFOR-analogous positions are general terrorist cells and specialized units such as suicide bomber groups, direct assault groups, and beheading crews. These are low-level operatives akin to non-commissioned officers (NCOs) or police sergeants with more specialized training. The three Al Qaeda members who served as pilots in the 9/11 attacks would fall into this category.

Operational Leaders. Based on the coordination of many tactical units into an ongoing operation in large battlespace (operational space) areas. This can include military theater operations taking place across a country or countries. Regional leaders of Al Qaeda cells in the various regions of the world—such as Abu Musab Al-Zarqawi in Iraq and Mohamed Atta, the Al Qaeda member who coordinated the four 9-11 strike groups — are examples of operational leaders. Interestingly, Atta also served as the 4th tactical

leader for the 9-11 attacks. Such blurring between operational leaders and tactical leaders is not uncommon—this was also the case for Al-Zarqawi who directly engaged in beheadings. The reason for this overlap is that many radical Islamic leaders consider themselves warriors rather than soldiers, thus no distinction is made between the managers of violence (officers) and those that participate in it (enlisted troops) unlike in the US military.

Strategic Leaders. This is the level of political officials, senior level military officers, and police chiefs. These leaders set strategic and grand strategic goals and policies. For Al Qaeda, Usuma bin Laden and his second in command Ayman al-Zawahiri would be examples of strategic leaders.

Shamil Basayev, the infamous and now deceased Chechen leader, is an outlier in that he participated in all three levels of leadership activity. This would be tantamount to Usama Bin Laden picking up an AK-47 and both coordinating and engaging in school takeovers and aircraft hijackings.

Another analytical method utilized is based on generational patterns of the leadership. Such patterns can be derived from both the leaders themselves and the life cycle of an organization. Leader-based patterns can be viewed stemming from work conducted on the Provisional Irish Republican Army (PIRA).³ PIRA patterns are:

Early Founding Leaders. First generation leaders were from the working class and veteran terrorists. They were street smart rather than educated and tended to be in their 30s and 40s. As a result, they commanded great respect but were not charismatic individuals. Examples are MacStiofain, McKee, O’Bradaigh, and O’Conail who emerged from 1969-1975.

Follow-on and Continuity Leaders. Second generation leaders drew from both the working and middle class. They joined PIRA, when formed, and were more capable because of the benefits of universal education. These individuals were in their early 20s and cults of personality formed around them. Examples are Adams, McGinnis, and Sands, who emerged from 1978 to the present.

Embryonic Leaders. Projected third generation leaders are now emerging but not yet identified. While still drawing from the lower and middle classes, these individuals are well educated up to and including holding graduate degrees. They are primarily attracted to Shin Féin over PIRA. This group is in its 20s and 30s and can be viewed as 'political constituency' organizers as Northern Irish Catholics shift from a political violence (i.e. terrorism) to political accommodation strategy.

Al Qaeda leadership patterns are also now appearing. Major firebreaks in Al Qaeda organizational development can be noted from the early Mujahideen days in Afghanistan to the formation of Al Qaeda and the full scale operating of its training camps in Afghanistan and then again due to the post 9-11 loss of those training camps and the new reliance upon the internet for training and radicalization and the absorption of affiliated groups. These shifts all required different forms of leadership development and effectiveness. It is noteworthy that 88% percent of the Al Qaeda central staff leaders had finished college and 20% had doctorates.⁴ Its leaders were far more educated, hence more capable of engaging in complex planning, from a much earlier point in its OPFOR evolution than a group such as PIRA/Shin Féin that is only now beginning to seek this level of education in its leadership. Still, with Al Qaeda's globalization and increasing incorporation of outside cells to the network (such as the Maghreb Arabs) the average educational level of organization leadership is decreasing.⁵ It will be interesting to see what impact this will have on overall organization development and effectiveness.

Further crossovers and overlaps with patterns of leadership and OPFOR development can be derived from research conducted by this author on Weapons Systems Lifecycles. This research has been used to characterize the lifecycles of the European knight and the modern battle tank. A four-stage process is articulated from the emergence of a system through its dominance on the battlefield to its eventual obsolescence and discontinuation of use. Lifecycles research also has applicability to terrorists and other types of OPFORs such as insurgents, non-state combatants, criminal soldiers, and the like. The stages, with OPFOR examples applying to the above groups, are as follows:

Entrepreneurial. The OPFOR is in its early stages of development and is literally in the process of 'working out' all of its processes and structures. The organization can rapidly

change its course of behavior if required and tends to act in unexpected ways because of its lack of organizational sophistication. This amateur component creates deadly potential because many combatants are not inhibited by the 'professional blinders' of more institutionalized OPFORs. This has been seen with the wave of terrorists that emerged in the late 1960s and 1970s. This wave became professionalized to the extent that weapons of mass destruction (WMD) firebreak developed. None of those OPFORs chose to cross that firebreak. The new wave that emerged from the late 1980s through the present has less inhibition about crossing the WMD firebreak, as witnessed by the Aum Shinrikyo Sarin gas attack on the Tokyo subway in 1995. Hamas is representative of a still entrepreneurial OPFOR and is currently in the process of solidifying its power base in Gaza. Hamas cannot be bargained with or bought off and refuses to accept Israel's right to exist. In fact, it actively seeks Israel's destruction as one of its religious duties. Hamas leaders promote the purity of its mission and accept probable martyrdom as a result of being targeted by the Israeli's for assassination, thus placing the organization's needs above their own.

Institutionalized. The OPFOR has matured to the point that it has its tactics, techniques, and procedures (TTPs) standardized along with its organizational structure, doctrine, training, logistics, and other functioning elements. Both Al Qaeda and Hezbollah have pretty much reached this stage of their organizational existence with Hezbollah having a far tighter span of control over its members. Al Qaeda, on the other hand, contains many nodal hubs not fully under its central command. These OPFORs are in sync with much of their affiliated population's needs—these being radicalized Sunni and Shia groups, respectively—with effective leaders that truly believe in their organizational missions.

Ritualized. The OPFOR is no longer a smoothly functioning entity. Specific procedures are undertaken because it has always been that way and a high level of organizational dogma has developed where actions are taken and no longer questioned. Independent thinking of the younger members of the organization is not tolerated and, when taken to extremes, the group has become so corrupted that it does not care about the

operational mission but rather the personal gain of those in offices of authority. An example of the ritualized stage can be found with the Fatah terrorist group in the West Bank and Gaza. It has become so corrupt over the decades of its existence that it has lost control in Gaza to Hamas and is currently attempting to reform its institutions in the West Bank. Leaders tend to be rigid, self-aggrandizing, and care little about their constituent populations.

Satirized. The OPFOR has become so dysfunctional as no longer to be a viable combatant force. Actual operations, when attempted, take on almost a comical nature. Either the mission is no longer valid or the OPFOR structure and function has become fully obsolete. In either case, the OPFOR should no longer exist. Typically, in the case of terrorist groups, the members are killed off or imprisoned long before entering this final stage. The arrests, starting in 1999, of Symbionese Liberation Army (SLA) members provide a tragic story of individuals who have been on the run from the law for decades. The very concept of a group such as the SLA still being active or attempting to field an effective combatant force is so out of sync with current realities to the point of being ludicrous.

The first and the second lifecycle stages are the most important, for this is when an OPFOR has real combat capability. Entrepreneurial and institutionalized leadership roles are very different from one another as learned in the business realm. Typically, a new corporation is founded by an entrepreneur-type leader. Once it grows beyond a certain point, however, a different leader type is required to take the now mature company forward. Parallels exist in the terrorist world as seen earlier with generations identified for the PIRA.

Exceptions also seem to exist. Of interest in this regard is the strange tale of the Palestinian terrorist leader Yasser Arafat. As the original founder of Fatah in the late 1950s, he is recognized as an entrepreneurial leader with a fanatical cult of personality developing around him. His uncanny ability to hang on to both his life and power over the course of decades allowed him to enter each of the four phases of his organization's lifecycle as its leader. At his high point, he sported a pistol while addressing the General Assembly of the United Nations and, later, was even awarded a Nobel Peace Prize. As time went on, the overall perception of

Arafat as initially a dangerous terrorist and then as peacemaker changed to that of an impotent old man whose actions were eventually viewed as both pathetic and comical in nature.

OPFOR Networks

OPFORs as entities committed to the mission of promoting their political, social, and religious goals and end states by means of violence (i.e. conflict, terrorism, and war) organize themselves in various ways. The following organizational types of OPFOR networks that exist have been identified below:⁶

- *Hub (star or wheel)*. Fully centralized information flow. OPFOR Examples: Terrorist Cell. Strength: Total centralized command and control of forces. Weakness: Subject to decapitation strike.
- *Central and Subordinate Hubs (hierarchy)*. Partially centralized information flow. OPFOR Example: Pre 9-11 Al Qaeda model and Hezbollah. Strength: Centralized command and control of forces. Weakness: Subject to decapitation strike, potential slow reaction cycles with periphery of network.
- *Chain (line)*. Segmented information flow. Can represent one top down informational path within a hierarchy but in this instance is used as a smuggler chain where direct top down or center to periphery leadership authority does not exist. OPFOR Example: Drug Smugglers. Strength: OPSEC (operational security). Weakness: Information flow vulnerable to breakage and slow reaction cycles.
- *Mesh (distributed/netlike)*. Partially decentralized information flow. OPFOR Example: Post 9-11 Al Qaeda model. Strength: Peripheral groups and clusters take on command and control responsibilities and decapitation strike less catastrophic. Weakness: Peripheral activities may be in variance to centralized command and control operational plans and strategies.
- *All-channel (fully connected/full-matrix)*. Fully decentralized information flow at all levels. OPFOR Example: Anarchists. Strength: Common operating picture,

quick reaction cycles, swarming, and not subject to decapitation strikes.

Weakness: OPSEC (operational security).

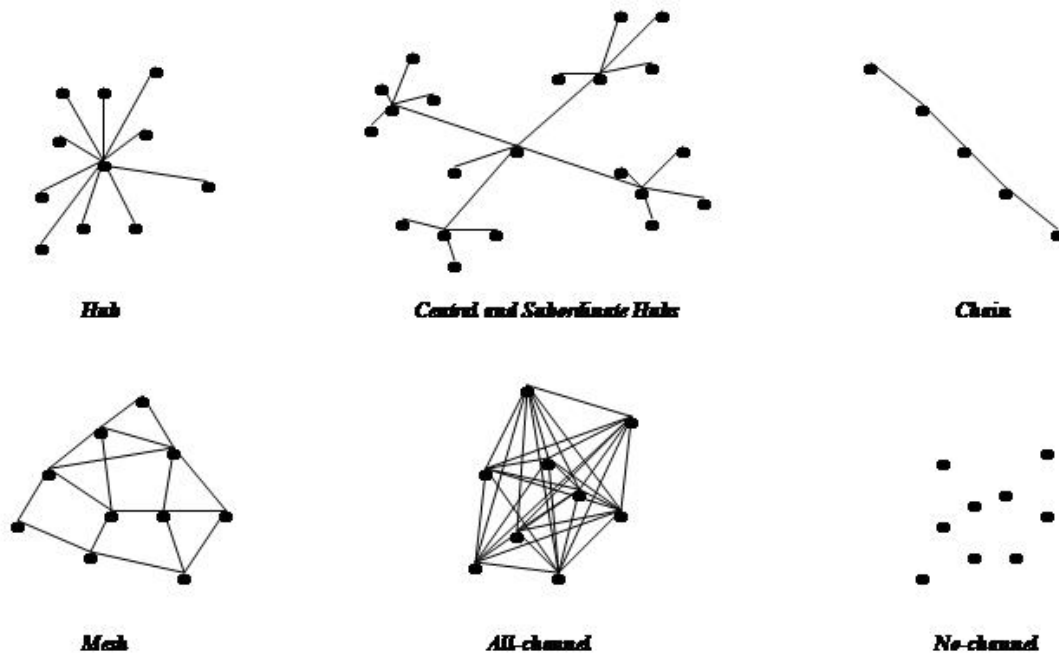
- *No-channel (nodes but no traceable connections)*. No tactical or operational informational flow between nodes. OPFOR Example: Phineas Priests. Strength: OPSEC (operational security). Weakness: No command and control of forces.

A more esoteric and self-contained view on leadership and networks can be taken if 'leaderless resistance' thinking is incorporated.⁷ This body of OPFOR work seeks to challenge US governmental authority by proposing an insurgent movement based on individual nodes unconnected to one another. The network shares the same common vision and end state desired but has no linkages between the individual nodes. This makes the OPFOR network impervious to infiltration and compromise. The result would be each node functioning as a combatant leader within its own self-contained OODA loop. The Phineas Priests, a white supremacist terrorist organization, promote a prime example of this form of leadership:

...the Priesthood operates in extreme secrecy and believes in 'leaderless resistance,' tactics that ensure members escape detection and the organization is protected from infiltration...the Phineas Priests is not a membership organization in the traditional sense: there are no meetings, rallies or newsletters. Rather, extremists become 'members' when they commit 'Phineas acts,' any violent activity against 'non-whites.'⁸

It is of particular note that the Phineas Priests exist within an OPFOR network of no-channel nodes. That is to say, none of the nodes are physically connected to one another. This is significant in and of itself, and does not appear to exist in past OPFOR network-focused literature.

Figure 1. OPFOR Networks



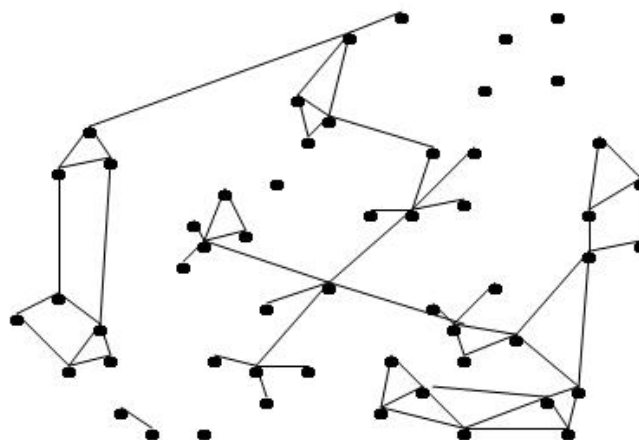
Source: Courtesy of the Counter-OPFOR Corporation ©

Al Qaeda is an interesting case because the pre- and post 9-11 organizational models based on central and subordinate hubs (hierarchy) and mesh (distributed/netlike) information flows currently exist simultaneously, giving this OPFOR a unique duality. The old centralized structure is attempting to reassert itself from safe havens in the tribal lands of Western Pakistan. At the same time, spontaneous generation of Jihadi cell clusters in Europe and other parts of the globe along with purposeful command and control decentralization to the periphery help to extend its netlike nature. Al Qaeda name-branding has also become apparent, with affiliated groups in Iraq and Lebanon declaring their loyalty to the organization and taking on its name. In many ways, Al Qaeda has become a network of networks with the old guard having authority over one region of the network and affinity groups and outsiders comprising other parts of it. To this mix should be added more than a few non-channel nodes representing lone wolf affinity adherents who engage in independent acts of violence much like

Phineas Priests. The end result is some sort of hybrid semi-mesh and hubs organizational structure with some satellite no-channel nodes:

- *Semi-mesh and hubs (hierarchy blended with distributed clusters) with some No-channel nodes.* Partially centralized and decentralized information flow. Strength: Centralized command and control of forces for part of the network and peripheral groups; clusters take on command and control responsibilities. “Decapitation” strikes less catastrophic for other parts of the network. Random no-channel activities represent some wild card potentials. Weakness: Part of the network subject to decapitation strike and potential slow reaction cycles with periphery of network and part of the network peripheral and satellite no-channel activities may be in variance to centralized command and control operational plans and strategies.

Figure 2. Al Qaeda Network



Semi-mesh and Hubs with No-channel Nodes

Source: Courtesy of the Counter-OPFOR Corporation ©

Such an organizational structure would readily help to explain great leadership tensions like those that existed between Usama Bin Laden and Ayman Al-Zawahiri in their dealings with self-proclaimed Al Qaeda in Iraq leader Abu Musab Al-Zarqawi. Al-Zarqawi engaged in a terror campaign against Shia targets in Iraq that helped to turn Islamic public opinion against him and push Iraq further towards fragmentation and civil war during the American occupation. It never became clear if Al-Zarqawi was acting as Bin Laden's rogue lieutenant or his direct rival. Although he had rebuffed some of Bin Laden's earlier attempts at recruiting him, he still conducted operations on his behalf as a contractor when it served his purposes. Ultimately, Al-Zarqawi boosted the Al Qaeda brand name by gaining it great levels of media attention by means of his exploits and atrocities. At the global political level, however, he clearly had a negative impact on Al Qaeda strategies by focusing on Shia instead of American targets, thereby additionally straining Sunni and Shia relations.

Furthermore, this organizational structure with its no-channel nodal elements would help to explain the generation of wildcard acts of violence such as the DC sniper attacks, Los Angeles International Airport El Al terminal shooting, and other Al Qaeda affinity based incidents which straddles the lines between crime, delusional behavior, and quasi-terrorism.⁹ Practical application of the theoretical insights gained from such new perceptions would include a revisiting of the legal definition of conspiracy (such as that due to OPFOR no-channel nodal element coordination following the tenets of leaderless resistance) and a need to create countermeasures to hostile meme emergence (for example the directive in the white supremacist work The Hunter to kill interracial couples).

Research Implications

As discussed in this essay, a dynamic relationship exists between leaders and OPFOR organizational structures. Important factors concerning this relationship from the leadership side are the role and function of the leader. Key elements of this relationship from the organizational side are OPFOR network type and where the OPFOR is in its evolutionary process. Questions abound concerning whether OPFOR leaders naturally chose those roles and functions or if they had those positions thrust upon them by circumstance, coercion, or chance.

While organizational structures shape the role and functions of leaders (e.g. no dominant leader will emerge in a no-channel network), leaders affect the shaping of organizations through control over initial organizational structure development and decisions regarding its future evolution.

Leader intelligence and education may have a great deal of impact on OPFOR capabilities, but pure meritocracy-based organizations do not exist and those leaders that achieve positions of power draw upon other advantages including financial resources, family connections, patron and client relationships, natural charisma, and class privilege. It is well noted that, given his background, Usama Bin Laden had many things going for him but, from the perspective of sheer intellect, he functions on a much lower tier than many of his chief officers and aides.

A typology of four different leadership forms exists in a loose relationship to OPFOR organizational structures. The first type of leadership exists from a “tightly coupled” perspective, that is, leadership derived from detailed instruction and control.¹⁰ These are direct managers of violence who give specific orders to others and watch over them to ensure that those directives are precisely carried out. These *Direct Control Leaders* are primarily found in hub nodes that follow hierarchical and industrial processes based on tasks. The second and third types of leadership exist due to variations pertaining to a “loosely coupled” perspective wherein leadership is derived from individuals who share trust and knowledge.¹¹

The second type of leadership seeks to transmit the commander’s intent to their followers, who then seek to fulfill the mission. These *Network Influence Leaders* may be found in hub nodes but may also be found in mesh and, to a lesser extent, still immature all-channel networks. Tolerance exists for the tasks undertaken to achieve this goal with some self-organizing behavior evident. Those directed take on the role of independent contractors more than that of employees.

The third type of leadership is based on an even more extreme and evolved form of decentralized control. These leaders exist in mesh and all-channel networks that have developed a network or collective vision. The commander’s intent is no longer required from a leadership perspective. The nodal members each influence, and are influenced by, the network

vision of the mission or end state. These *Collective Vision Leaders* may shift leadership roles to engage in specialized activities and, if sufficiently evolved, have the capability to engage in swarming behavior. To these entities, symbols of rank and authority are no longer required and are generally ignored.

The fourth type of leadership is based on the *Isolated Leader*, who functions as a true force-of-one. These leaders exist only in no-channel networks that are decentralized as to operate on the edge of chaos. Examples would be Phineas Priests and Al Qaeda affinity members engaging in lone wolf behavior derived from the principles of ‘leaderless resistance’. The desired higher end state or mission of the network is, however, derived in two completely different ways. In the case of the Phineas Priests, a simple prime directive exists—to engage in any violent activity against non-whites. In the case of Al Qaeda no-channel affinity node members, the end state is transmitted by *Network Influence Leaders* such as Usuma Bin Laden or Ayman al-Zawahiri.

These four leadership types are mutually exclusive, except for the *Direct Control Leaders* and the *Network Influence Leaders*, as the same individual can exhibit both forms of leadership. A primary example in this regard is Usama Bin Laden as the head of Al Qaeda. He has direct command and control by means of the older centralized structure of the organization while at the same time influencing the broader network containing peripheral mesh clusters and satellite no-channel nodes.

This typology of four different leadership forms should not be viewed as the final word concerning leadership in OPFOR networks. Rather, its value is that of a starting point from which to understand destructive and disruptive targeting schemes, group penetration and intelligence gathering processes, network cooption and subversion, OPFOR evolution or de-evolution, and, ultimately, to gain a better understanding of how our own mesh and all-channel network structures are evolving. In order to understand these processes, real world OPFOR data needs to be continually obtained and updated, network relationships visually characterized, and the leadership forms applied.

Lessons learned from this endeavor will have direct bearing on future law enforcement doctrinal, organizational, and technological requirements. While general law enforcement

functions and structures would probably not at first benefit or be impacted, more specialized units focused on counter-terrorism, counter-drug, and counter-gang missions would be directly influenced. Such units will find themselves, at times, directly pitted against organized OPFORs rather than groups of disorganized individuals engaging in criminal activities. The insights generated from OPFOR leadership analysis can also be applied to our own police leadership typologies developed in this volume on police leadership and in other related works. This would allow for a better critique of opposing and allied leadership models and possibly provide us with a much more comprehensive understanding of both “good guy” and “bad guy” leadership dynamics. The benefits provided would thus have broad law enforcement utility.

Endnotes

1. The best-known work on the topic is probably Marc Sageman’s *Understanding Terror Networks* (University of Pennsylvania Press, 2004) (see also Bunker & Begert, 2005; Krebs 2002).
2. Combat effectiveness can be measured in both destructive and disruptive ways. Central and subordinate hubs structures (hierarchies) engage in industrial style destructive targeting while mesh, all-channel, and no-channel structures engage in informational-based disruptive targeting strategies.
3. See Garfield (2005).
4. Sageman (2004), p. 75.
5. *Ibid.*, pp. 75-76.
6. This figure is a blending of *Fig 1. Centralized, Decentralized, and Distributed Networks* in Baran (1964) and *Figure 1.1 Three Basic Types of Networks* in Arquilla and Ronfeld (2001), with additional modifications and additions by the author.
7. See Beam (1992).
8. Group Profile: Phineas Priests. MIPT Terrorism Knowledge Base. <http://www.tkb.org/Group.jsp?groupID=3244>. Accessed November 19, 2007.
9. Debate exists concerning the use of leaderless resistance strategies by individuals influenced by Al Qaeda ideology but with no organizational ties to the semi-mesh and hubs network. For a recent perspective see “The ‘Lone Wolf’ Theory and John Allen Muhammad.” MEMRI Website. Special Dispatch Series No. 1772. November 21, 2007. <http://memri.org/bin/latestnews.cgi?ID=SD177207>. Accessed November 21, 2007. Derived from “The Islamist website www.ek-ls.org, hosted by NOC4Hosts Inc., Tampa, FL, USA, published, on November 19, 2007, a proposal by regular forum participant ‘Jihadi Salafi’ on Al-Qaeda’s possible use of a ‘lone wolf’ operative in the U.S. and/or the West.” p. 1.
10. See Atkinson and Moffat (2005).
11. *Ibid.*

References

- Alberts, D.S. & Hayes, R.E. (2005). *Power to the edge: Command...control...in the Information Age*. Washington, DC: Command and Control Research Program.
- Arquilla, J. & Ronfeldt, D. (Eds.). (1997). *In Athena's camp: Preparing for conflict in the Information Age*. Santa Monica, CA: RAND.
- Arquilla, J. & Ronfeldt, D. (Eds.). (2001). *Networks and netwars: The future of terror, crime, and militancy*. Santa Monica, CA: RAND.
- Atkinson, S.A. & Moffat, J. (2005). *The agile organization: From informal networks to complex effects and agility*. Washington, DC: Command and Control Research Program.
- Baran, P. (1964). *On distributed communications: I. Introduction to distributed communications networks*. Memorandum RM-4320-PR. United States Air Force Project RAND. Santa Monica, CA: RAND.
- Beam, L. (1992, February). Leaderless resistance. *The Seditonist*, 12. Accessed online <http://www.louisbeam.com/leaderless.htm>.
- Bunker, R. J. (2002, May 22-23). *Networked OPFORs: Strategic and operational considerations*. Presentation to Project O'Bannon, Event 4: Terrorist Networks: An Analysis. Quantico, VA: Marine Corps Warfighting Lab.
- Bunker, R.J. & Begert, M. (2005). Operational combat analysis of the Al Qaeda network. In R.J. Bunker (Ed.), *Networks, terrorism and global insurgency* (pp. 146-169). London: Routledge.
- Don, B.W. et al. (2007). *Network technologies for networked terrorists*. Santa Monica, CA: RAND.
- Garfield, A. (2005). PIRA lessons learned: A model of terrorist leadership succession. In R.J. Bunker (Ed.), *Networks, terrorism and global insurgency* (pp. 104-114). London: Routledge.
- Krebs, V.E (2002). Mapping networks of terrorist cells. *Connections*, 24(3), 43-52.
- MacDonald, A. (1989). *The hunter*. Hillsboro, WV: National Vanguard Books.
- Murphy, P. (2004). *The wolves of Islam: Russia and the faces of Chechen terrorism*. Washington, DC: Brassey's Inc.

- Sageman, M. (2004). *Understanding terror networks*. Philadelphia, PA: University of Pennsylvania Press.
- Sullivan, J.P. (2003). Networked force structure and C⁴I. In R.J. Bunker (Ed.), *Non-state threats and future wars* (pp. 144-155). London: Frank Cass, 2003.
- Sullivan, J.P. & Bunker, R.J. (2005). Multilateral counter-insurgency networks. In R.J. Bunker (Ed.), *Networks, terrorism and global insurgency* (pp. 183-198). London: Routledge.
- von Clausewitz, C. (1976). *On war*. M. Howard & P. Paret, eds. and trans. New York: The Free Press.